PRODUCT BRIEF
Intel® Desktop Board DX79SI
Extreme Series

ATX Form Factor

Primed and Ready!

Introducing the Intel® Desktop Board DX79SI, designed to unleash the power of the new Intel® Core™ i7 Processors in the LGA2011 package

Build Upon a Winner

With the Intel® Desktop Board DX79SI, Intel is once again offering the board of choice for champion gamers and performance enthusiasts who live to push their systems WAY beyond the limits. The DX79SI board offers the customization features every power user needs. The Overclocking Assistant provides single-step overclocking[1] to boost performance to quickly maximize your gaming advantage. The massive data throughput and support for the Intel® Core™ i7 processor allows more applications to run simultaneously, with less wait time.

Power for the Hottest New Games

With incredible support for up to twelve threads of raw processing power, unprecedented bandwidth, quad-channel DDR3 memory with support for up to eight DIMMs, the Intel Desktop Board DX79SI goes where no desktop board has gone before.

BIOS Vault Technology protects the board and provides fault tolerant and secure firmware. Intel BIOS is protected from outside attacks and enables advance security checks and balances. Fast Boot also speeds through boot times and eliminates unnecessary delays. Intel® Extreme Memory Profiles (Intel® XMP) is a performance-packed expansion of the standard DDR3 memory specification, enabling a robust and stable solution for ultra-fast memory.

The Boxed Intel® Desktop Board DX79SI Solution Includes:

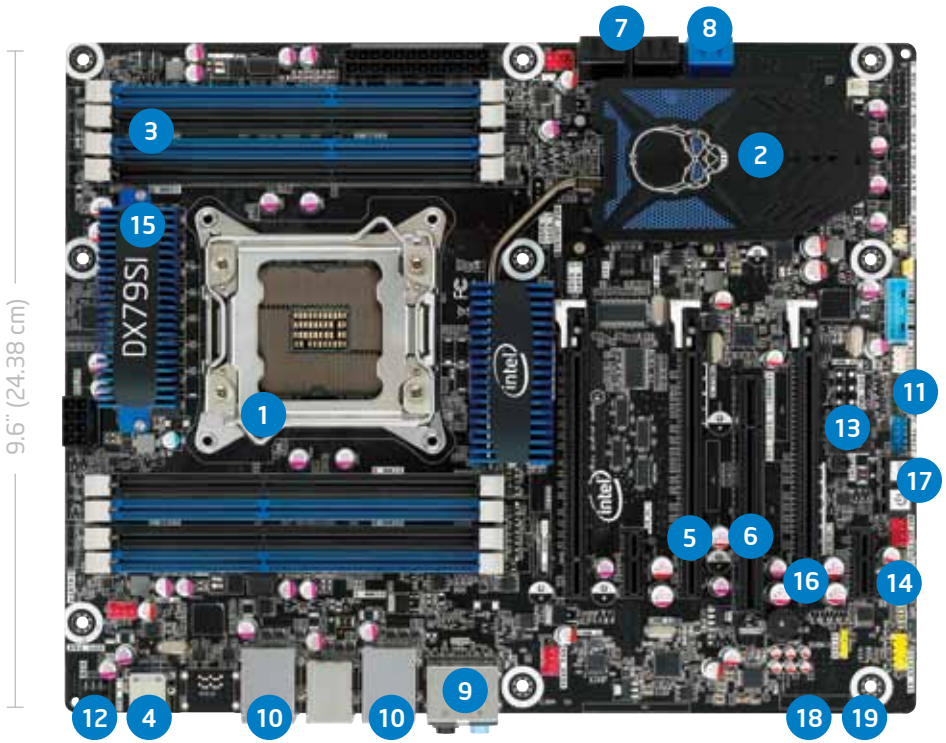
- Intel® Desktop Board DX79SI
- ATX 2.2 compliant I/O shield
- UV reactive SATA cables
- Extreme mouse pad
- Bluetooth*/Wi-Fi module
- Board and back panel I/O layout stickers
- Quick reference guide
- Intel® Express Installer driver and software DVD
- Windows* Premium WHQL certified
- NVIDIA* SLI* Bridge connectors
- Post code information card

Software Included:

Capability	Software Included
Utilities	▪ Intel® Extreme Tuning Utility (Intel® XTU) (Internet Download): Monitors system temperature and fan speeds. Enables manual tuning of memory and processor or one-button auto tuning ▪ Intel® Express Installer: Streamlines board integration
Productivity	▪ Additional free software: Helps get your system up and running smoothly and quickly
Antivirus	▪ ESET* Smart Security 5 Antivirus: Removes viruses automatically, blocks certain internet worm attacks, and protects e-mail and instant messages

Intel® Desktop Board DX79SI Extreme Series
Features and Benefits

1. **Support for the Intel® Core™ i7 processor Extreme Edition in the LGA2011 package:** Supports both 4 core and 6 core processors. Features Intel® Turbo Boost Technology,[2] Intel® Hyper-Threading Technology[3] for exceptional performance and scalability, and 15 MB Shared Intel® Smart Cache, enabling dynamic and efficient allocation of cache.
2. **Intel® X79 Express Chipset:** Features DMI uni-directional connectivity to the processor.
3. **Eight DIMM slots:** Designed to support overclocked[1] DDR3 2400+ O.C.[4] memory, delivering up to 64 GB/s memory bandwidth.
4. **Four Super Speed USB 3.0 ports, two IEEE 1394a ports (1 external, 1 via internal header), and 14 USB 2.0 ports (6 back ports, 8 via internal headers):** Provides for the most flexible back panel connectivity options.
5. **Three PCI Express 3.0* x16 slots:** Improved graphics bandwidth and support for certified triple-card ATI CrossFireX* and NVIDIA* SLI.*
6. **PCI Express* and PCI connectors:** Flexibility to support PCI Express and legacy PCI devices.
7. **Two SATA 6.0 Gb/s ports and four SATA 3.0 Gb/s ports:** Support for up to six ports with the ability to disable individual ports via the Intel® Rapid Storage driver stack.
8. **Intel® Rapid Storage Technology:** Performance and reliability with support for RAID 0, 1, 5, 10, and Intel® Rapid Recover Technology.
9. **10-Channel Intel® High Definition Audio[6] (7.1):** Enables high-quality integrated audio that rivals the performance of high-end discrete solutions.
10. **Dual Intel® Gigabit Ethernet LAN:** Features onboard 10/100/1000 Mb/s Ethernet LAN connectivity.
11. **Consumer infrared receiver and transmitter:** Supports receiving, learning, and emitting capabilities, controls up to two additional CE devices with your PC, and eliminates the need for a USB CIR dongle.
12. **Back-to-BIOS switch:** Allows easy access to the BIOS for easy overclocking[1] and recovery.
13. **Post code decoder:** Allows for display of post codes for debug along with the included post code quick reference card displaying critical areas to help troubleshoot performance-increase roadblocks.
14. **Initialization and diagnostic LEDs:** Provides instant visible system feedback.
15. **Exclusive voltage regulator heat sinks:** Provides reliable and silent cooling for extreme performance tuning.
16. **Solid-State capacitors and exclusive Power Supervisor:** Maximizes stability and power for advanced performance tuning.
17. **Tweaker switches:** Power and reset switches for overclocking[1] on the go, quick reset and power on.
18. **ATX (9.6" x 11.6") Form Factor:** ATX board supports more fully featured tower designs.
19. **Lead-free:** Meets all worldwide regulatory requirements for lead-free manufacturing.



Intel® Desktop Board DX79SI Extreme Series
Technical Specifications

PROCESSOR
Processor Support
- Intel® Core™ i7 processors in the LGA2011 package
- Intel® Turbo Boost Technology[2]
- Intel® Hyper-Threading Technology[3]
- Integrated Memory Controller with support for up to 64 GB[4] of system memory DDR3 2400+ O.C. SDRAM
- Intel® Fast Memory Access
- Supports Intel® 64 architecture[5]

CHIPSET
Intel® X79 Express Chipset
- Intel® X79 PCH
- Intel® Rapid Storage Manager (RAID 0, 1, 5, 10)
- Two SATA (6.0 Gb/s) and four SATA (3.0 Gb/s) ports

USB PORTS
- Six Hi-Speed USB 2.0 ports via back panel
- Eight additional Hi-Speed USB 2.0 ports via four internal headers
- Four Super-Speed USB 3.0 ports via NEC controller

SYSTEM BIOS
- 64 Mb Flash EEPROM with Intel® Platform Innovation Framework for EFI Plug and Play, IDE drive auto-configure
- Advanced configuration and power interface V3.0b, DMI 2.5

FAST BOOT
- Fast boot
- Intel® Express BIOS update support: BIOS update via F7 function key

HARDWARE MANAGEMENT FEATURES
- Processor fan speed control
- System chassis fan speed control
- Voltage and temperature sensing
- Fan sensor inputs used to monitor fan activity
- Power management support for ACPI 3.0b

INTEL® PRO 10/100/1000 NETWORK CONNECTION
- Dual Intel® LAN on the back panel
- New low-power design can meet Energy Star* 5.0 specifications

EXPANSION CAPABILITIES
- Three PCI Express* x16 connectors (configured as x16/x8/x8 in Tri graphics mode)
- Two PCI Express 2.0 x1 slots
- One PCI slot

AUDIO
- 10-channel Intel® High Definition Audio[6] codec
- 8-channel via the back panel
- 2-channel via the front panel
- Back panel support for output via optical cable
- One internal header for S/PDIF output for HDMI* support

SYSTEM MEMORY
Memory Capacity
- Eight 240-pin DIMM connectors supporting quad channel memory. Two double-sided DIMMS per channel
- Maximum system memory up to 64 GB[7] using 8 GB double-sided DIMMs

Memory Types
- DDR3 2400+ O.C. SDRAM memory support
- Non-ECC Memory

Memory Modes
- Quad- or tri- or dual- or single-channel operation support

Memory Voltage
- 1.35 V low voltage
- 1.5 V standard JEDEC voltage
- Support for Intel® XMP extended voltage profiles

JUMPERS AND FRONT PANEL CONNECTORS
Jumpers
- Single configuration jumper design
- Jumper access for BIOS maintenance mode

Front Panel Connectors
- Reset, HD LED, Power LEDs, power on/off
- Four front-panel Hi-Speed USB 2.0 headers
- One front-panel Super-Speed USB 3.0 headers
- Front-panel audio header
- One IEEE 1394a header

MECHANICAL
Board Style
- ATX

Board Size
- 11.6" x 9.6" (29.46 cm x 24.38 cm)

Baseboard Power Requirements
- ATX 12 V

ENVIRONMENT
Operating Temperature
- 0° C to +55° C

Storage Temperature
- –20° C to +70° C

REGULATIONS AND SAFETY STANDARDS
United States and Canada
UL 1950, Third edition–CAN/CSA C22.2 No. 950-95 with recognized U.S. and Canadian component marks

Europe
Nemko certified to EN 60950 International Nemko certified to IEC 60950 (CB report with CB certificate)

EMC Regulations (tested in representative chassis)

United States
FCC Part 15, Class B
FCC Part 15, Class B open-chassis (cover off) testing

Canada
ICES-003, Class B

Europe
EMC directive 89/336/EEC; EN 55022:1998 Class B; EN 55024:1998

Australia/New Zealand
AS/NZS 3548, Class B

Taiwan
CNS 13438, Class B International CISPR 22:1997, Class B

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Environmental Compliance
Complies with US CRF via EN55022 +6 db in system configurations with an open chassis and EU Directive 89/336/EEC and use via EN55022 and EN50082-1 in a representative chassis.

Lead-Free: The symbol is used to identify electrical and electronic assemblies and components in which the lead (Pb) concentration level in any of the raw materials and the end product is not greater than 0.1% by weight (1000 ppm). This symbol is also used to indicate conformance to lead-free requirements and definitions adopted under the European Union's Restriction on Hazardous Substances (RoHS) directive, 2002/95/EC.

For ordering information, visit **www.intel.com**

For the most current product information, visit **www.intel.com/go/idb**

[1] Warning: Altering clock frequency and/or voltage may (i) reduce system stability and useful life of the system and processor; (ii) cause the processor and other system components to fail; (iii) cause reductions in system performance; (iv) cause additional damage; and (v) affect system data integrity. Intel has not tested, and does not warranty, the operation of the processor beyond its specifications.

[2] Intel® Turbo Boost Technology requires a PC with a processor with Intel Turbo Boost Technology capability. Intel Turbo Boost Technology performance varies depending on hardware, software, and overall system configuration. Check with your PC manufacturer on whether your system delivers Intel Turbo Boost Technology. See www.intel.com/technology/turboboost for more information.

[3] Intel® Hyper-Threading Technology requires a computer system with a processor supporting HT Technology and an HT Technology-enabled chipset, BIOS, and operating system. Performance will vary depending on the specific hardware and software you use. For more information including details on which processors support HT Technology, see www.intel.com/info/hyperthreading

[4] Maximum peak memory bandwidth requires four DDR3 modules to be populated in each of the blue memory slots. DDR3 2400 memory support on this motherboard requires advanced knowledge of BIOS and memory tuning; individual results may vary. For specific supported memory for this motherboard, please visit www.intel.com/products/motherboard/ for more details.

[5] 64-bit computing on Intel® architecture requires a computer system with a processor, chipset, BIOS, operating system, device drivers, and applications enabled for Intel® 64 architecture. Processors will not operate (including 32-bit operation) without an Intel 64 architecture-enabled BIOS. Performance will vary depending on your hardware and software configurations. See http://developer.intel.com/technology/intel64/index.htm for more information.

[6] Intel® High Definition Audio requires a system with an appropriate Intel® chipset and a motherboard with an appropriate codec and the necessary drivers installed. System sound quality will vary depending on actual implementation, controller, codec, drivers, and speakers. For more information about Intel® HD Audio, refer to www.intel.com/design/chipsets/hdaudio.htm.

[7] System resources and hardware (such as PCI and PCI Express*) require physical memory address locations that can reduce available addressable system memory. This could result in a reduction of as much as 1 GB or more of physical addressable memory being available to the operating system and applications, depending on the system configuration and operating system.

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Actual Intel® Desktop Board may differ from the image on the box.

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